

SUGGESTED READING

- Living Fishes of the World.* By Earl S. Herald. Doubleday & Company, Inc., Garden City, N. Y., revised 1962, 304 p.
- The Life Story of the Fish.* By Brian Curtis. Harcourt, Brace and Co., New York, 1949, 284 p. (cloth); Dover Publications, New York, 1961, 284 p. (paperbound).
- The Ways of Fishes.* By Leonard P. Schultz. D. Van Nostrand Co., Inc., New York, 1948, 264 p.
- Fishes.* A guide to familiar American species. A Golden Nature Guide. By Herbert S. Zim and Hurst H. Shoemaker. Simon and Schuster, New York, 1956, 160 p.
- How to Know the Freshwater Fishes.* By Samuel Eddy. Wm. C. Brown Co., Dubuque, Iowa, 1957, 253 p.
- The Fisherman's Encyclopedia.* Edited by Ira N. Gabrielson. Stackpole Co., Harrisburg, Pa., revised 1963, 759 p.
- Freshwater Fishery Biology.* By Karl F. Lagler. Wm. C. Brown Co., Dubuque, Iowa, revised 1956, 421 p.
- Fresh Water Fishing.* Bait and fly casting, spinning, lures and equipment. By Arthur H. Carhart. A. S. Barnes and Co., New York, 1949, 237 p.
- The Western Angler.* An account of Pacific salmon and western trout of British Columbia. By Roderick Haig-Brown. William Morrow & Co., New York, 1947, 356 p.
- Trout.* By Ray Bergman. Knopf, New York, 1952, 482 p.
- Trout Streams.* By Paul R. Needham. Comstock Publishing Co., Ithaca, N. Y., 1938, 233 p.
- Steelhead.* By Claude M. Kreider. G. P. Putnam's Sons, New York, 1948, 182 p.
- Life Histories of the Steelhead Rainbow Trout and Silver Salmon.* By Leo Shapovalov and Alan C. Taft. Calif. Dept. Fish and Game, Fish Bull. no. 98, 1954, 375 p.
- Steelhead to a Fly.* By Clark C. Van Fleet. Little, Brown and Co., Boston, 1954, 275 p.
- All About Brook Trout from Maine to California.* With pointers on where and how to fish for them. By Bob Elliot. Practical Science Publishing Co., Inc., Orange, Conn., 1954, 242 p.
- Waters of the Golden Trout Country.* By Charles McDermant. G. P. Putnam's Sons, New York, 1946, 162 p.
- Yosemite and Kings Canyon Trout.* By Charles McDermant. G. P. Putnam's Sons, New York, 1947, 178 p.
- Fishes of Yosemite National Park.* By Willis A. Evans and Orthello L. Wallis. Yosemite Nature Notes, revised 1955, 30 p.
- Inland Fisheries Management.* Edited by Alex Calhoun. California Department of Fish and Game, 1966, 546 p.

- Fish and Fishing in Lassen Volcanic National Park.* By Merlin K. Potts and P. E. Schulz. Loomis Museum Association, Mineral, Calif., 1953, 61 p.
- California "Catchable" Trout Fisheries.* By Robert L. Butler and David P. Borgeson. Calif. Dept. Fish and Game, Fish Bull. no. 127, 1965, 47 p.
- A Revised Check List of the Freshwater and Anadromous Fishes of California.* By Leo Shapovalov, William A. Dill, and Almo J. Cordone. Calif. Fish and Game, 1949, vol. 45, no. 3, p. 159-180.
- Keys to the Freshwater and Anadromous Fishes of California.* By J. B. Kimsey and Leonard O. Fisk. Calif. Fish and Game, 1960, vol. 46, no. 4, p. 453-479.
- Distinctive Characters of the Species of Anadromous Trout and Salmon Found in California.* By Leo Shapovalov. Calif. Fish and Game, 1947, vol. 33, no. 3, p. 185-190.
- Trout and Salmon Culture (Hatchery Methods).* By Earl Leitritz. Calif. Dept. Fish and Game, Fish Bull, no. 107, reprinted 1969, 169 p.
- Aquatic Insects of California.* With keys to North American genera and California species. Edited by Robert L. Usinger. Univ. of California Press, 1965, 508 p.
- McClane's Standard Fishing Encyclopedia and International Angling Guide.* Edited by A. J. McClane. Holt, Rinehart and Winston, Inc., New York, 1965, 1057 p.

ACKNOWLEDGMENTS

This booklet in its present form is based upon earlier editions prepared by J. H. Wales, formerly of the California Department of Fish and Game.

The 12 black and white drawings of trout were made by Felicien Philippe of Hollywood. The cover illustration and the drawings of the kokanee salmon and mountain whitefish were done by Paul Johnson of Sacramento.

The illustrations of trout food insects were made by Dr. E. Laurence Palmer and are used through the courtesy of *Nature Magazine*.

"In writing on the trout of California, one does not willingly lay down the pen at the end. The most beautiful of fishes, the most charming of lands, where the two are connected, one wishes to say something better of them than has been said. It is with regret that he lets fall the pen in confession of inability to say it."

DAVID STARR JORDAN

From SALMON AND TROUT OF THE PACIFIC COAST

*Thirteenth Biennial Report of the State Board of Fish Commissioners
of the State of California, 1893-94*

GLOSSARY

- Adipose fin*—the small, fleshy fin on the back between the dorsal and tail fins.
- Anadromous*—ascending streams from the ocean for spawning.
- Anal fin*—the fin on the under side of the fish between the vent and the tail.
- Anterior*—in front of, or toward the head end.
- Caudal fin*—the tail fin.
- Caudal peduncle*—the slender portion of the body just ahead of the tail fin.
- Dorsal fin*—the large fin on the back.
- Fingerling*—The Trout Policy of the California Department of Fish and Game designates all trout weighing one ounce or less as fingerlings; a one-ounce rainbow trout is about 5 inches long.
- Fry*—the young of fishes.
- Gill arch*—the bony arch to which the gill filaments and gill takers are attached.
- Gonad*—an ovary or testis.
- Lateral line*—a series of sensory pores and tubes that appear as a line along the side of the fish.
- Mandible*—the lower jaw.
- Maxillary*—the hindmost bone of the upper jaw.
- Milt*—male sex product.
- Opercle*—the gill cover.
- Ovaries*—the female reproductive organs which produce the eggs.
- Parr marks*—the dark vertical bars lying in a row along the sides of young trout and occasionally of older trout (see illustrations of golden trout).
- Pectoral fins*—the paired fins attached just behind the head.
- Ray*—a supporting element in any of the fins (none in the adipose fin). In trout the rays are segmented and flexible.
- Spawning*—the act of laying and fertilizing eggs.
- Testes*—the male reproductive organs which produce sperm.
- Ventral fins* (pelvic fins) —the paired fins attached to the belly directly beneath the dorsal fin.
- Vomer*—the bone in the roof of the mouth toward the front.
- Yolk sac*—a sac containing yolk, attached to the belly of recently hatched trout. The yolk is used as food and is finally absorbed.



STATE OF CALIFORNIA
RESOURCES AGENCY
DEPARTMENT OF FISH AND GAME
1416 9th Street
Sacramento, California 95814

Return Postage Guaranteed



**PREVENT
FOREST FIRES!**